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# **Notice of Allowability**

Application No.

10/763,695

Examiner

Allen C. Ho

Applicant(s)

ELLENBOGEN ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 01 December 2005.
2. ☒ The allowed claim(s) is/are 3,4,6,8,9 and 14.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## **Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

## DETAILED ACTION

### *Allowable Subject Matter*

1. Claims 3, 4, 6, 8, 9, and 14 are allowed.
2. The following is an examiner's statement of reasons for allowance:

With regard to claims 3 and 4, although the prior art discloses a method for determining a characteristic of a first object in a package of multiple objects comprising the steps of creating a lineogram from a CT scan of the package, determining a first position in the lineogram wherein the first object is substantially separated from other objects, and determining a characteristic of the first object from data at the position, it fails to teach or fairly suggest the steps of determining a cluster index for positions in the lineogram and selecting the first position based upon the clutter index as claimed in claim 3.

With regard to claim 6, although the prior art discloses a method for determining a characteristic of a first object in a package of multiple objects comprising the steps of creating a lineogram from a CT scan of the package, determining a first position in the lineogram wherein the first object is substantially separated from other objects, and determining a characteristic of the first object from data at the position, it fails to teach or fairly suggest the step of determining a center of gravity of the first object, determining a sine wave through the center of gravity of the first object, and modifying data in the lineogram such that data relating to the first object based upon the sine wave as claimed in claim 6.

With regard to claim 8, although the prior art discloses a method for scanning a bag to locate potential threats comprising the steps of performing a CT scan of the bag, creating a

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lineogram from the CT scan of the bag, selecting positions in the lineogram wherein objects are substantially separated from other objects, determining a characteristic of objects from data at the selected position, and determining whether a threat exists based upon the characteristics of the objects, it fails to teach or fairly suggest the steps of determining a clutter index for positions in the lineogram and selecting positions in the lineogram wherein the clutter index is less than a predetermined threshold as claimed in claim 8.

With regard to claims 9 and 14, although the prior art discloses a method for scanning a bag to locate potential threats comprising the steps of performing a CT scan of the bag, creating a lineogram from the CT scan of the bag, selecting positions in the lineogram wherein objects are substantially separated from other objects, determining a characteristic of objects from data at the selected position, and determining whether a threat exists based upon the characteristics of the objects, it fails to teach or fairly suggest the steps of determining a center of gravity of a first object having a characteristic of a threat, determining a sine wave through the center of gravity of the first object, and modifying data in the lineogram such that data relating to the first object based upon sine wave as claimed in claim 9.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Arguments***

3. Applicant's arguments filed 01 December 2005 with respect to the drawings have been fully considered and are persuasive. The objections of the drawings have been withdrawn.
4. Applicant's arguments filed 01 December 2005 with respect to the specification have been fully considered and are persuasive. The objections of the specification have been withdrawn.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:
  - (1) Bijjani *et al.* (U. S. Patent No. 6,778,761 B2) disclosed a method and an apparatus for analyzing an object.
  - (2) Hsieh (U. S. Patent No. 6,421,552 B1) disclosed a method and an apparatus for estimating cardiac motion using projection data.
  - (3) Fitchard *et al.* (U. S. Patent No. 6,385,286 B1) disclosed a delivery modification system for radiation therapy.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen C. Ho whose telephone number is (571) 272-2491. The examiner can normally be reached on Monday - Friday from 8:00 am - 5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward J. Glick can be reached at (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Allen C. Ho  
Primary Examiner  
Art Unit 2882

09 December 2005